

# DERMATITIS HERPETIFORMIS:

## ITS RELATION TO SO-CALLED IMPETIGO HERPETIFORMIS.

BY LOUIS A. DUHRING, M.D.,

Professor of Skin Diseases in the University of Pennsylvania.<sup>1</sup>

---

IN a recent communication made before the American Medical Association I described a remarkable disease of the skin under the name dermatitis herpetiformis. The observations there recorded are the result of many years' study upon this subject, several of the cases from which my data were derived having been under surveillance for a number of years, and it is this fact, in my opinion, which makes the notes especially valuable. Had the notes of any one of these cases been confined to the condition as shown by a single attack, we certainly should have had a very different idea of the process as a whole from that which is now held. In the study of diseases of the skin the natural course of the process must not be lost sight of. We cannot make the diagnosis in all cases from the presence of the lesion alone; we must note further its evolution and general characteristics. This remark is especially applicable to multiform or protean diseases, such, for example, as the affection under consideration.

Permit me first to state briefly what dermatitis herpetiformis stands for, according to my definition. It is a well-defined disease characterized by a variety of symptoms, which, although they appear dissimilar, and perhaps in no way related at first sight, will sooner or later be found to be but different expressions of one process. It is one of the rarer cutaneous manifestations, only one variety of which has been heretofore carefully described, namely, the pustular, by Hebra, under the name of impetigo herpetiformis.

The disease in severe cases is ushered in with more or less constitutional and febrile disturbance, characterized by malaise, shiverings, alternate hot and cold sensations or fever. Itching or burning is early

<sup>1</sup> Read before the American Dermatological Association, at its eighth annual meeting, August 27, 1884.

announced, followed in the course of from twelve to forty-eight hours by more or less eruption, consisting of erythematous, maculo-papular, papular, tubercular, vesico-papular, vesicular, vesico-bullous, bullous, or pustular lesions—as a rule all having peculiarities which distinguish them from the manifestations characterizing other well-known diseases.

The erythematous lesions are usually in the form of patches of an erythema multiforme-like or urticarial kind, varying in size from a small coin to the palm of the hand, and of an irregularly rounded shape, tending, when in proximity, to coalesce. Some are ill-defined; others have a sharp, somewhat marginate outline. They are usually more or less raised, somewhat less in the cases I have met with than in either erythema multiforme or urticaria. They resemble especially the lesions of the former of these diseases. They are not so fugitive as in urticaria. I may even say that they bear more resemblance to ill-defined patches of erythema multiforme than to any other disease. These remarks may be taken to apply in part also to the maculo-papular lesions, but the papules and tubercles are different, being imperfectly defined inflammatory elevations, variable in size, shape, and consistence. The vesico-papules are similar to those encountered in erythema multiforme or in the early stages of herpes iris, and where numerous and close together occurring upon thickened, pigmented skin may resemble the first stages of confluent variola.

The vesicular lesions vary in size from a pin-head to a pea; are flat or slightly raised, broad, angular or irregular in outline; of a pale-yellow, straw-coloured hue, tensely distended; glistening, and without areolæ, unless closely grouped. The blebs vary in size from a pea to a pigeon's egg or even a hen's egg, and possess most of the features enumerated in speaking of the vesicles. They are, however, raised, as in the case of most other blebs, as of pemphigus, and may have opalescent, cloudy, hemorrhagic, or even pustular contents, although the pustules to be presently described do not pass through stages of evolution from the bleb, but begin usually as clearly defined small pustules.

The pustules are peculiar. They begin as small, flat, pin-head sized, whitish lesions which grow, as a rule, to the size of a small pea, when they are surrounded by a deep-red, "angry-looking," more or less raised, areola. Their course up to this point occupies from two to six days. Sometimes two or three small pustules appear as a little cluster; as they grow they run together forming a larger pustule. About the time the lesion is at its height, one, two, four, or more new, small, flat pustular points or distinct pustules begin to appear in the form of a ring, or as a segment of a circle, immediately around the original lesion, which by this time is somewhat crusted. As these increase in size they are absorbed into the first pustules, the whole being covered with a yellowish, greenish or brownish, flat, adherent crust. New small pustules may still continue



to form around this lesion as before, or the process may be arrested. The number of pustules varies; there may be a half a dozen, scattered about, or hundreds, some the size of a pin-head or of a pea; others as large as a quarter dollar. When they are in close proximity and have run together large patches may form.

I may now direct attention to a peculiarity of the several lesions of the disease, and this is the tendency for two or more kinds to exist simultaneously, as, for example, vesicles, vesico-blebs and blebs, or it may be vesicles, blebs, and pustules—both rare combinations in the list of cutaneous diseases. The order of manifestation is variable. There is no definite order in the evolution of the lesions during an attack, nor even in relapses or in recurrences of the disease. This irregularity in the evolution of the process is peculiar, and must be regarded as one of the marked features of the disease. It has been present in almost all of the cases that have been under my observation. The longer the patient has been under observation the more frequently has this feature asserted itself. An attack beginning as an erythema may pass rapidly into the vesicular or bullous variety, to be in a few weeks succeeded by the pustular variety, this again by the vesicular or bullous variety, followed by perhaps the pustular for the second time, these several changes or varieties of the disease appearing, it may be, in the course of a month or a year. The mixture or commingling of the several lesions, two or more kinds often showing themselves during an attack of any one variety, certain lesions decidedly predominating and giving the type to the eruption, is striking. Thus in the pustular variety it is not uncommon to note vesicles, vesico-blebs, and blebs seated in close proximity to the pustules; and in the bullous variety to observe pustules almost contiguous to the blebs.

Multiformity, therefore, is the rule, and where cases remain under notice for a period of years, and repeated recurrences are recorded, this feature is in almost all instances one which impresses itself alike on patient and physician. Eczema, as we all well know, is often multiform, but surely this disease far exceeds eczema in the extent to which this character may go. It is not only multiform, but is capriciously so, the various manifestations often taking place in rapid succession, but especially in the case of new crops of lesions and relapses. At one period it is strictly vesicular, this variety continuing it may be several weeks or months, several attacks of the same kind appearing during this time; on another occasion it will be vesicular and bullous, or alternately vesicular and pustular. The tendency is to be vesicular and bullous, the erythematous and pustular manifestations being rarer.

The general character of the eruption is herpetic, in the sense that the lesions incline to group or to appear in small or large patches, and further that where they form in proximity they tend to coalesce. This feature,

however, is variable. The arrangement may be in little groups of two or three or four lesions, or, as in the case of the pustules, they may form in circles or segments of circles around the original lesion. In both the erythematous and pustular varieties there is a marked disposition to spread on the periphery, and in the former variety a disposition to creep, causing at times marginate patches. In the vesicular and bullous varieties there is less tendency to group, and the vesicles and blebs may even be disseminated. In the same patient with different attacks I have noted the lesions disseminated and grouped. It frequently happens when the eruption is abundant that grouping will occur here and there, while in between the groups and elsewhere the vesicles and blebs will be disseminated. Another evidence of the herpetic nature of the disease is noted in the irregularity of the lesions, especially in the case of the papules, vesicles, blebs, and pustules. The irregular, angular, or stellate outlines of vesicles and blebs, as a rule without marked areolæ, are strongly suggestive of the nature of the process. Pigmentation must also be mentioned as a symptom common to all varieties, and in chronic cases is usually pronounced. Considerable thickening of the skin is also marked in such cases. In almost all instances, at all periods of the eruption, an irritable state of the skin, comprising itching, pricking sensations, heat and burning, is a prominent symptom. In most cases it precedes the outbreak for several days, becoming more pronounced as the eruption reaches its height, then declining and again asserting itself with a new crop of lesions. Itching is the sensation generally complained of. It is usually severe, causing great distress of mind and body. In most of the cases that I have encountered it has shown itself intense, and to be far more formidable than in an eczema of like grade. Burning sensations also are frequently described, especially in connection with the pustular variety; and when the varieties have changed from one to another, as the vesicular to the pustular and back again, itching and burning will exist alternately or be present together, constituting a sensation said to be much the most trying to bear. Sometimes it happens that an attack of the pustular manifestation, especially when the lesions remain small, is unaccompanied by subjective symptoms. I recall one such case in a man where the pustules were abundant, the patient stating that at the time he suffered but little inconvenience from the eruption; but in a subsequent attack, of the vesicular and pustular varieties combined, he was greatly distressed with itching and burning.

The disease usually runs a chronic course, extending over years, repeated attacks appearing from time to time at intervals of months or years. I have known cases where it has continued, most rebellious to treatment, for five, ten, and fifteen years. During these long periods the patient has suffered more or less continuously, sometimes with periods of



months of comparative or entire freedom from the disease ; but the tendency is to persist, frequently in a milder form as time rolls on. In some cases I believe complete recovery has taken place, but with the histories at hand I cannot speak positively on this point. In chronic cases the process often takes on a subacute form. The disease attacks both sexes, and usually in early or middle adult life. It occurs in single as well as in married women, though more frequently in the latter, especially during pregnancy and in the parturient state. For its cause we must look to the nervous system. It is without question a neurotic disease, in some cases being manifestly under the control of the nervous system. This statement need excite no surprise when we consider the large number of similar cutaneous diseases traceable directly to impaired nerve force, a list which is yearly being enlarged.

With these introductory remarks upon the disease I shall proceed to consider the subject of its relation to the impetigo herpetiformis of Hebra. I have already (in a paper read before the American Medical Association at its last meeting<sup>1</sup>) expressed the opinion that the form of disease described by Hebra was the same as the pustular variety of dermatitis herpetiformis, and that it constituted merely one variety of an extensive multiform disease, and that therefore the term "impetigo" was inappropriate. I also made the statement that the so-called impetigo herpetiformis, in opposition to the views of Hebra, Kaposi, Neumann, and other dermatologists, occurred in men as well as in women, and in women independent of pregnancy.

If we look into the history of impetigo herpetiformis we shall find that the name dates back to 1872, when Hebra first described the disease in a paper entitled "On some Affections of the Skin occurring in Pregnant and Puerperal Women ;"<sup>2</sup> his remarks being based upon five cases observed by him. Before this, however, Bærensprung had met with a striking case of the disease. In the Atlas of Skin Diseases, by Hebra and Bærensprung,<sup>3</sup> this latter author figures a case with the title "herpes circinatus," which portrays a peculiar and striking form of circinate and annular pustular disease, which Hebra subsequently stated was an example of his impetigo herpetiformis. No notes of the case accompany the portrait, nor is any information given concerning the disease beyond the statement that it illustrates a rare form of herpes circinatus. It manifestly portrays the affection under discussion.

Two years later Auspitz,<sup>4</sup> with the name "herpes vegetans," reported two cases which I think without doubt represent unusual forms of the

<sup>1</sup> May 6, 1884. For abstract see Phila. Med. Times, May 17, 1884, p. 603, and New York Med. Journ., May 17, 1884, p. 562.

<sup>2</sup> Wiener med. Wochensch., No. 48, 1872.

<sup>3</sup> Tafel viii. Erlangen, 1867.

<sup>4</sup> Archiv für Derm. u. Syph., 1869, p. 247.

disease we are considering. The first case (which was under the care of a "Dr. G." at the time of the outbreak, and who gave Dr. Auspitz an account of the eruption) was a pregnant woman. The cutaneous disease began as a bright-red erythema upon the abdomen, which soon passed into a moist, itching, and burning surface, studded here and there with vesicles. The disease at the time was regarded as an eczema. The vesicles, in groups, continued to appear, passing into pustules closely crowded and covered with crusts, the condition resembling a papillomatous vegetation ("*fleischwärzenartigen Wucherung*"). Febrile disturbance existed, and the patient suddenly collapsed with œdema of the lungs. There was no autopsy.

The second case is one which was under Hebra's care in the hospital, and was one of the five cases of Hebra. The woman was twenty-six years old, married, and in the sixth month of pregnancy. The eruption consisted of reddened skin with vesicles and pustules varying in size from a pea to a bean, disseminated and grouped in a circular form. In the inguinal region there were dollar-sized red, excoriated, moist patches covered with greenish crusts, with here and there vesicles and pustules. On the lower extremities there were disseminated pustules and vesicles. There was burning and itching, also marked febrile disturbance. Later some of the patches assumed a papillomatous or vegetating appearance, "like acuminated warts." The eruption increased in extent and intensity, the lesions spreading on the periphery of the patches, the patient being very ill. She was delivered of a dead child, but a week later died with symptoms of diarrhoea and delirium. The autopsy showed "endometritis, oöphoritis, metrosalpingitis, and peritonitis." Dr. Auspitz sums up the characters of the disease as follows: 1. The occurrence of grouped vesicles and pustules with eczematous infiltration between the lesions. 2. Cutaneous vegetation on these patches of condyloma-like tumours. 3. The development of the disease in both cases in pregnant women. The reporter regarded the disease as new, and thought that the term "herpes vegetans" expressed the condition in both cases.

We may now consider Hebra's paper. In the article above alluded to, this distinguished observer<sup>1</sup> called attention to an eruption of which at the time he had encountered only five examples, all occurring in pregnant and puerperal women. It was characterized by pustules filled with pus at their first appearance, and by these affecting a peculiar mode of grouping and peripheric extension. In almost every case they first appeared at the inner surface of the thighs, partly in groups the size of a dime, and partly as separate pustules the size of a pin-head. Successive crops immediately followed, extending towards the periphery in a circular or iris form, so

<sup>1</sup> Amer. Jour. of Syph. and Derm., April, 1873, p. 156. Translated from Wiener med. Wochensch. No. 48, 1872.



that in the course of a few days a gradual invasion took place on the thighs, abdomen, legs, arms, hands, and feet, and afterwards on the neck, face, and scalp. While at the centre of each group the pustules became covered with flat brownish scabs, at the circumference new ones filled with yellow pus were being constantly produced. In this disposition they resembled “herpes iris circinatus ;” but as from the very first, Hebra states, it was a pustular disease, it must be regarded as a form of impetigo, and might, from its circular mode of grouping, be termed “impetigo herpetiformis.”

The affection throughout its whole course was attended by intense fever, a dry tongue, and great prostration. In three of these cases this reproduction of the pustules continued with more or less rapidity until the patient died ; while in the other two, after several weeks’ duration, the pustules dried up, the thick scabs finally falling off and leaving the skin beneath healthy but strongly pigmented. Some of the pustules, instead of drying, especially at the bends of the joints, were converted into a grayish, stinking mass, which, lying on a red and moistened base, assumed an eczematous appearance. Only one out of the five cases finally survived.<sup>1</sup> Each outbreak of pustules was preceded by shivering, which was followed by febrile action that lasted some days. Of the five women, three had been delivered from two to five weeks before admission, and two came in during the last month of pregnancy. The appearances were the same both before and after delivery. The autopsies of the four women who died revealed no certain cause of death. Neither the mode of life, employment, nor constitution of these patients threw any light upon the origin of this affection. In none of them was there any symptom of syphilis. In the absence of all other etiological data, and seeing that these cases all occurred in pregnant women, it might be stated, in connection with the cases already referred to in this paper, as most probable that these instances of herpetiform impetigo were dependent upon a diseased change in the genital apparatus. Several years later (1876) Hebra again takes up the subject in his *Atlas of Skin Diseases*,<sup>2</sup> and gives two portraits. He says, in allusion to the inappropriateness of regarding it as a form of herpes, “the disease under consideration does not appear in the form of vesicles and circles of vesicles, nor does it run an acute or typical course. . . . It makes its appearance in the form of pustules, resembling in the manner of spreading herpes iris and circinatus, and on this account the disease had better be termed impetigo herpetiformis.”

The disease, in the first article, is graphically but very briefly described. The leading features only are touched upon. There are many points of interest which barely receive mention, such, for example, as the descrip-

<sup>1</sup> In Hans Hebra’s *Work on Diseases of the Skin*, Braunschweig, 1884, p. 198, it is stated that this patient also died subsequently during a relapse.

<sup>2</sup> Heft ix. Tafeln 9 and 10. Text, p. 111.

tion of the lesions, their multiformity, and their evolution. These features, however, are brought out in the report of a case by Auspitz, already referred to, and also in the case reported by Geber, to be spoken of presently. This criticism is made for the reason that, I think, had Hebra's account of the disease been more complete, the affection would have received more attention at the hands of dermatologists. The description was scarcely full enough to enable observers to recognize the affection. The subject, I am sure, has been received by many with doubt as to the precise features characterizing the disease. It may be added that all of Hebra's cases were severe, and that the two portraits given in his *Atlas of Skin Diseases* show the disease at its height, and are sketched with a bold brush and in strong colours.

One of Hebra's cases, as stated, was reported in full by Geber.<sup>1</sup> The patient was a woman, a dark blonde, aged twenty-five, in the ninth month of pregnancy. The skin disease had existed four weeks. It consisted of numerous disseminated, miliary, and hempseed-sized vesicles. Here and there they occurred in groups of two, three, or more, in which event they ran together, crusted, and spread on the periphery, in the form of rings of pustules. In this manner, as in herpes iris, patches as large as a dollar or even the palm of the hand were formed, the centres being crusted with greenish-yellow crusts. The largest patches existed on the breasts, on the flexor surfaces of the thighs, on the abdomen, and about the flexures of the knees and elbows. The tongue also showed symptoms of the disease. After delivery the lesions began to desiccate and abundant desquamation set in, which, however, was shortly afterwards followed by signs of moist eczema about the neck and under the breasts. Three days after delivery diarrhœa occurred; the temperature and pulse both rose, and there were rigors. Later, the skin became clear of eruption, and the general symptoms ceased. Two weeks afterwards a relapse of the cutaneous lesions took place in the form of groups of vesicles involving the whole surface, pursuing the same course as before. A month later the patient was dismissed from the hospital. The description of the lesions in this case corresponds with the condition as portrayed in one of the plates in Hebra's *Atlas*, and it is probable that this case was utilized for the portrait.

Neumann first described the impetigo herpetiformis of Hebra in the third edition of his *Hand-book of Skin Diseases*,<sup>2</sup> in considering herpes zoster. A brief account of the disease, together with Auspitz's case, is given, and the titles "*herpes pyæmicus*" and "*herpes puerperalis*" suggested. In the fourth and fifth editions it finds a place under impetigo herpetiformis, a very brief account only being given, accompanied in the last edition with a wood-cut illustrating the anatomy of the lesion. In speaking of

<sup>1</sup> Bericht aus dem Wiener Allg. Krankenhause für 1871, von Hebra's Klinik, Wien, 1872; abstract in *Archiv für Derm. u. Syph.*, 1 Heft, 1873, p. 169.

<sup>2</sup> Wien, 1873, p. 185.



herpes, this author in the third edition of his *Hand-book of Skin Diseases*<sup>1</sup> describes at length an affection which he regarded as a form of herpes, a view which as we shall see he subsequently retracted. The subject was later made the occasion of a paper bearing the title "*dermatitis circumscripta herpetiformis*,"<sup>2</sup> under which name the disease appears in the fourth edition of his *Hand-book* (p. 347). He regarded the disease as "*herpes chronicus*," and so named it. Shortly after this publication, Hebra, in the second edition of his great work on diseases of the skin (p. 311), expressed himself to the effect that this affection was probably not herpes but rather lichen ruber occurring in groups. Neumann again described the disease in the fourth edition of his *Hand-book* with the same name (*dermatitis circumscripta herpetiformis*), giving special attention to the pathological anatomy. In the fifth edition of his work, however (p. 310), we find *dermatitis circumscripta herpetiformis* synonymous with lichen planus, being regarded as distinct from lichen ruber. I have felt it incumbent upon me, in connection with my subject, to give this history of the *dermatitis circumscripta herpetiformis* of Neumann, lest it should be thought by some to be the same as my *dermatitis herpetiformis*.

I may now refer to Heitzmann's interesting case. This author, in a paper<sup>3</sup> read before the American Dermatological Association, reports a case of *impetigo herpetiformis* under the heading "*on the relation of impetigo herpetiformis to pemphigus*." The patient was a well-nourished woman, aged fifty-two, who had given birth to several healthy children. She had had eczema the previous year, which had been cured. The mucous membrane of the lower lip, the gum, the cheeks, and the tongue, on the lateral parts, were the seat of flat blebs, partly confluent and partly coated with a grayish-yellow epithelial layer, which on many places being torn away left an intensely red, excoriated, bleeding surface. The right auricle was the seat of an eruption, also the skin of the neck, and the folds below the mammæ, the surface being dark-red, infiltrated, and thickened, as if the seat of *eczema rubrum*. On many places the periphery showed groups of small pustules. There was no fever; menstruation had ceased naturally several years before; nor was there any uterine disease. New eruptions of blebs occurred every few days on the mucous membrane of the oral cavity, preceded by sharp pains and a severe rigor. Pustules also appeared on the mucous membrane of the nose, accompanied by high fever, followed by erysipelas of the face. They moreover appeared on the body, on the genitals and about the umbilicus, the sites of former lesions being reddish-brown, pigmented or pale grayish-blue, coated with a thick, exuberant, irregular epidermal layer. Several weeks afterwards, during which period she had partly recovered, a few flaccid blebs appeared. Two weeks later, within two or three days, there

<sup>1</sup> Viertelj. für Derm. u. Syph., 1875, I. Heft, p. 41.

<sup>2</sup> Wien, 1873, p. 188.

<sup>3</sup> Archives of Dermatology, Jan. 1878.

appeared a great many "pemphigus blebs" on the abdomen, the back, and the feet, accompanied with high fever, weak pulse, signs of collapse, brain symptoms, and manifold other serious constitutional disturbances. The mouth and cutaneous manifestations were on several occasions repeated during the next three months, followed by emaciation, œdema, bed-sores, ascites, the patient dying from œdema of the brain. Heitzmann concludes his remarks by stating that the disease is closely allied to pemphigus, and the diseases must be regarded as being kindred to each other.

In recent English and American literature, with a few exceptions, no reference is made to impetigo herpetiformis, either as a distinctive disease or to the cases described by Hebra. Thus the books of Liveing,<sup>1</sup> Morris,<sup>2</sup> Bulkley,<sup>3</sup> and Fox<sup>4</sup> contain no allusion to the subject. Hyde,<sup>5</sup> in his *Treatise on Diseases of the Skin*, defines impetigo herpetiformis to be "a cutaneous disease of women, frequently complicating the puerperal state, characterized by the occurrence upon the skin and mucous membranes of concentrically grouped pustules and by a febrile condition which usually terminates fatally." A description is given of the affection, mainly based upon the cases of Hebra, with an allusion to Duhring's observations.

Besnier and Doyon, eminent French dermatologists, and the translators of Kaposi's *Pathologie und Therapie der Hautkrankheiten* (Paris, 1881, vol. ii. p. 49), in a note state that the author's description of impetigo herpetiformis is not sufficiently extended to base an opinion upon, and that it is necessary first to bring forward a record of the facts. They object to the denomination impetigo herpetiformis; first, because "la dermatite pustuleuse circinée et excentrique," of which they state the affection in question is an example, cannot be grouped with impetigo, as this term is used by French dermatologists; secondly, because the title herpetiform can be applied only to an affection truly of the form of herpes, that is to say, resembling the herpes type (herpes labialis, herpes zoster, etc.), and not to a special eruption which does not belong exclusively to herpes. They regard the disease as of septicemic origin. Barthélemy states<sup>6</sup> that the disease is rare in France, although it is not unknown to French accoucheurs, who regard it of septicemic origin. G. Behrend, in his *Lehrbuch der Hautkrankheiten*,<sup>7</sup> describes the disease briefly, drawing upon the Viennese observations for the account, but does not present any new facts.

<sup>1</sup> Handbook of the Diagnosis of Skin Diseases, Amer. ed. New York, 1879.

<sup>2</sup> Skin Diseases. London, 1879.

<sup>3</sup> Manual of Skin Diseases. New York, 1882.

<sup>4</sup> Epitome of Skin Diseases, 3d Am. ed., revised by T. C. Fox. Phila., 1883.

<sup>5</sup> Philadelphia, 1883.

<sup>6</sup> French translation of the second edition of Duhring's *Treatise on Skin Diseases*, p. 334, note. Paris, 1883.

<sup>7</sup> Berlin, 1883, 2te auflage, p. 260.



Kaposi, in the last edition of his work,<sup>1</sup> in considering "impetigo herpetiformis," states that eleven cases have been observed at the clinic of the Vienna General Hospital, all occurring in pregnant women, and for the most part in the latter months of gestation. Ten of the eleven cases ended fatally, recovery taking place in one case. In one, apparent recovery occurred, which, however, in a few weeks was followed by a relapse and death. In another, the disease, occurring in two rapidly succeeding pregnancies followed by cure, ended fatally in the third pregnancy. In Hans Hebra's recent work,<sup>2</sup> the subject of impetigo herpetiformis (Hebra) is considered and described, but nothing new is added to Prof. Hebra's original account of the disease. He states that they have observed in Vienna about ten cases of the disease, all of which occurred in women towards the end of pregnancy or in the puerperal state.

In conclusion, I may say that there exists no room for doubting the relationship between the impetigo herpetiformis of Hebra and the pustular variety of dermatitis herpetiformis. The two are one and the same, are identical, as must be seen, I think, upon looking into the subject; and if this be the case, the whole field opens and must include a variety of other manifestations, namely, the other varieties of dermatitis herpetiformis, as I have described them briefly in the second edition of my Treatise on Skin Diseases in speaking of the impetigo herpetiformis of Hebra, and also in my paper read before the American Medical Association already alluded to. The subject, it seems to me, is most interesting. Our knowledge of the disease, if my views be correct, is yet in its infancy. As clinical reports and other information come to light it will be found that it will assume an important position in dermatology. Many cases that have hitherto been regarded as obscure or as difficult of classification will become plain. Cutaneous medicine covers an extended field in pathology, and to include the numerous manifestations now known to exist, both terms and definitions must be broad. The tendency in the past has been to study symptoms rather than processes. In the future it is to be hoped we shall be able to bring symptoms together, to reduce rather than to augment the number of diseases, and to classify them according to their pathology.

<sup>1</sup> Path. u. Therp. der Hautkrankheiten, Wien, 1883.

<sup>2</sup> "Die Krankhaften Veränderungen der Haut," etc., Braunschweig, 1884, p. 196.

